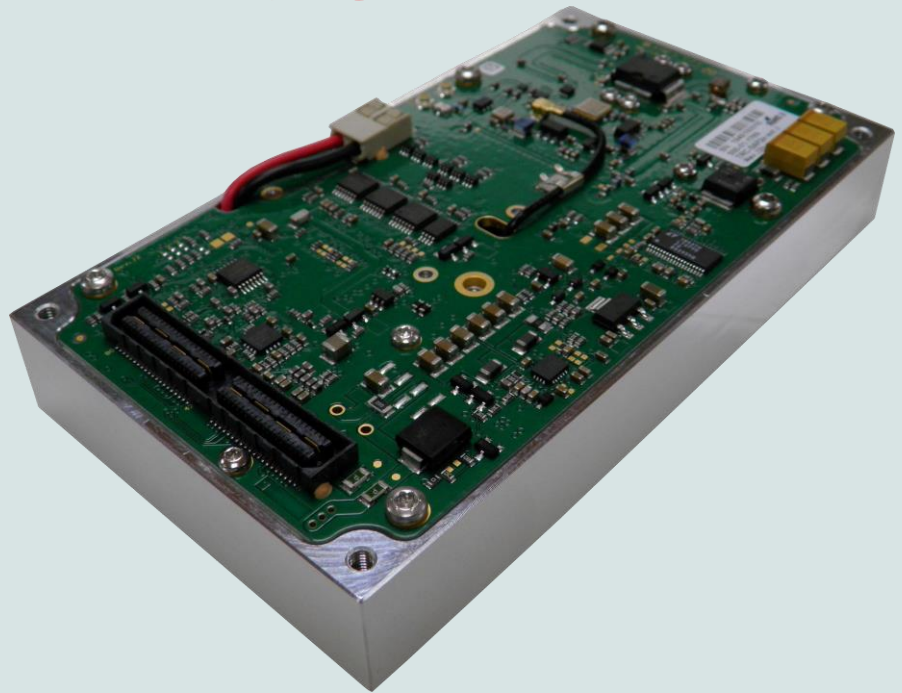


GSM-R module 8W



TRC-5AP2e (ext)* J

**GSM-R radio module for robust
voice and data communication**

***Optional: Extended GSM-R supported**

GSM-R technology for railways

TRC-5AP2e (ext) J

The module for tailored embedded solutions provides excellent receiver characteristics.



Technical data

| | | |
|--|--------------------------|--------|
| Dimensions | 125 x 70 x 25 mm [LxWxH] | |
| Weight | 285 g | |
| Supply voltage | 11 – 32 V _{DC} | |
| Current consumption @24V _{DC} | | |
| | @20°C | @70°C |
| Idle mode | 37 mA | 135 mA |
| Speech mode | 285 mA | 355 mA |
| GPRS (cl. 10) | 455 mA | 595 mA |
| In-rush current | 6 A | |
| Temperature range | -40°C to +85°C | |

Interfaces

80-pin board-to-board connector

Power supply
2 serial interfaces
USB
2 audio interfaces
LED interface

| | |
|---------------------|------------------|
| Antenna connector A | U.FL 50Ω [RX/TX] |
| Antenna connector B | U.FL 50Ω [RX] |
| Card reader | Mini-SIM |

ASCII features

| | |
|-------|--|
| VGCS | [Voice Group Call Service] |
| VBS | [Voice Broadcast Service] |
| UUS1 | [User-to-User Signaling type 1] |
| eMLPP | [enhanced Multi-Level Precedence and Preemption] |

EIRENE features

| | |
|---------------|----------------------------------|
| FN supported | [Functional Number] |
| PFN supported | [Presentation Functional Number] |
| REC supported | [Railway Emergency Call] |

Part no.

| | |
|-----------------|------|
| TRC-5AP2e J | 1380 |
| TRC-5AP2e ext J | 1381 |

System features

| | |
|--|------------------------|
| Frequency bands | |
| GSM-R/EGSM900/GSM1800 | [TRC-5AP2e J] |
| EGSM-R/EGSM900/GSM1800 | [TRC-5AP2e ext J] |
| RF output power | |
| Class 2 [8 W] for GSM-R/EGSM-R/EGSM900 | |
| Class 1 [1 W] for GSM1800 | |
| Professional Mobile Standard | |
| ETSI TS 102 933 V 2.1.1 | |
| ER-GSM Frequencies | [TRC-5AP2e ext J only] |
| GSM Phase 2 and 2+ | |
| Mobile station class B | |
| Audio | |
| Voice triple-rate codec for HR, FR, EFR and AMR for non ASCII applications | |
| Module control | AT commands |

Data services

| |
|--|
| GPRS class 10 |
| PBCCH supported |
| Coding scheme CS 1-4 |
| CSD data transmission |
| [Transparent and non transparent mode] |
| Fax group 3, class 2 |
| PPP stack for GPRS data transfer |
| Authentication: PAP, CHAP |
| Protocols: TCP, UDP, HTTP, FTP, SMTP, POP3 |
| SMS via GSM, GSM-R and GPRS |
| [MO, MT, CB, text and PDU mode] |

Applications

The module TRC-5AP2e (ext) J is designed for CAB-Radio and Data applications and fits perfectly into many embedded railway solutions.